Protest of	) Date: August 18, 1992
AIR COMPRESSOR DISTRIBUTORS, INC.	)
	)
Solicitation No. 204788-92-A-0053	) P.S. Protest No. 92-47

## **DECISION**

Air Compressor Distributors, Inc. ("ACD") protests the terms of Solicitation No. 204788-92-A-0053 for two air compressors, one coalescing filter and one refrigerated air dryer for the Louisville General Mail Facility ("GMF"). The solicitation was issued by the Office of Support Services ("OSS"), Louisville, KY on June 5, 1992, with an offer due date of June 29. ACD claims that the specifications are unduly restrictive of competition. The contracting officer states that no award will be made prior to the issuance of this protest decision.

This requirement was initially solicited pursuant to simplified purchasing procedures on January 13. A letter which contained the specifications was issued on this date seeking quotations from four vendors. The specifications required the offeror to provide "two (2) 50 hp, air-cooled rotary air compressors, 480 VAC, 3 phase motor, 1780 RPM 1.15 S.F., 60 Hz., direct drive, capable of producing 238 SCFM @ 100 PSIG; Gardner-Denver Electra-Saver II, with enclosures, Model ECHJGAQ or equal." The specifications further stated that "[t]he compressors shall be controlled to operate one machine continuously with the second machine operating only to maintain system pressure during peak loads." The solicitation did not set out the essential characteristics of the brand-name item and did not specify the basis for award.

Four offerors responded: ACD, Air Systems, Inc. ("Air Systems"), Atlas Machine Co. ("Atlas") and Louisville Air Center ("LAC"). ACD, the low offeror, offered as an "equal" product a Quincy AMA50. Air Systems, the second low offeror, proposed a different

 $<sup>\</sup>frac{1}{2}$  ACD is a distributor of Quincy air compressors.

"equal" product, the Ingersoll-Rand XF50. On January 22, the contracting officer issued Purchase Order No. 204788-92-P-0171 to Air Systems, having found ACD's product to be not in compliance with the specifications. On January 27, the contracting officer terminated Air System's purchase order for convenience, due to the discovery that award had not been made in strict conformance with the specifications, which were determined to be faulty.

On February 3, the Louisville OSS issued Solicitation No. 204788-92-A-0022, soliciting this requirement for the second time. The solicitation contained specifications which no longer identified a brand-name. The air compressor specification called for the following:

50 horsepower
Air Cooled
Rotary Screw Type
480 VAC 3 ph
1.15 Service Factor on Motor
1800 Maximum Motor RPM
Direct Drive (not direct coupled)
Capable of producing 225 scfm @ 100 psig
Capable of using either synthetic or mineral based oil
(ship with mineral based oil).

Full enclosure

Must be "skid mounted", capable of [being] mounted without an auxiliary [sic] pad.

Any integral pressure vessels must meet ASME standards.

Maximum [sic] 80 db with enclosure.

Heavy duty filter (capable of 99% filtration at contracting 5 microns).

Microprocessor control allowing, at a minimum, the

following features:

- \* Ability to sequence up to 4 machines and pre-program an alternating lead/lag schedule.
- \* Monitor system performance [sic] and maintenance functions.
- \* Provide safety interlocks.

ACD did not submit an offer in response to this solicitation, filing a protest dated February 14 instead. In this protest, ACD claimed that Solicitation No. 204788-92-A-0022 was unduly restrictive and was designed to "systematically exclude any compressor that does not use a microprocessor." ACD contended that there was no rationale for requiring: an 1800 maximum motor RPM; a unit capable of using either

 $<sup>\</sup>frac{2l}{l}$  The air compressor ACD was offering utilized analog gauges instead of a microprocessor to monitor the operation of the air compressor.

synthetic or mineral based oil; a unit capable of delivering 225 CFM 100 PSIG; or microprocessor control. In response to the protest, the contracting officer stated that a microprocessor was necessary "because it gives the ability to sequence up to four air compressors and pre-program an alternating lead/lag schedule; monitor system performance and maintenance functions; and provide safety interlocks." The contracting officer conceded that the rest of the specifications appeared to be unduly restrictive based on the lack of response.

In our decision, we found that the officer had "set forth <u>prima facie</u> support for the requirement for a microprocessor, stating that it is necessary for the overall operation of the system to have the sequencing, monitoring and safety features." We found it unnecessary to make a determination as to whether the contracting officer had established <u>prima facie</u> support for the rest of the specifications since the contracting officer had admitted that they were unduly restrictive. We sustained the protest and instructed the contracting officer to "cancel the solicitation and issue a new solicitation that accurately reflect[ed] the minimum needs of the Postal Service." We further directed the contracting officer's attention to Procurement Manual ("PM") 2.3.2 c., which specifies the requirements for product descriptions, and instructed the contracting officer to "make sure that only the features of the brand-name item that [could] be shown to reflect the actual minimum needs of the Postal Service [were] listed as essential characteristics."

On June 5, the Louisville OSS issued the instant solicitation. The air compressor specification required the following:

50 Horsepower
Air Cooled
Rotary Screw Type
480 VAC, 3 Phase, 60 Hz
1.15 Motor service factor
1800 MAXIMUM motor RPM
Output rated at 225 SCFM @ 100 PSIG with 68 Degree F.,
14.7 PSIA at sea level ambient [sic] conditions
Full acoustical enclosure
All integral pressure vessels must conform to ASME
standards

per SAE

Heavy duty filter capable of 99% filtration at 10 microns J726C standard

Control System As Follows: (This control system is necessary for the overall operation of the system and is vital to Postal operations.)

<sup>&</sup>lt;sup>3/</sup> Air Compressor Distributors, Inc. P.S. Protest No. 92-09, March 24, 1992.

Microprocessor controlled sequencer capable of handling at least 3 machines. Must be able to automatically alternate lead/lag schedules to maintain similar operating hours on each machine

Monitor system performance and maintenance functions

Provide for safety interlocks

The specifications for the coalescing filter and the refrigerated air dryer required the following:

## . COALESCING FILTER:

3" NPT inlet and outlet
Rated for minimum 450 SCFM @ 100 PSIg with a clean pressure
drop not to exceed 1 PSIG

## REFRIGERATED AIR DRYER:

3" NPT inlet and outlet connections
480 VAC, 3 phase, 60 Hz
Air Cooled
Maximum 2 horsepower compressor
Rated for minimum 450 SCFM @ 100 PSIG and 50 degree maximum
dew point outlet air and a maximum pressure drop of 5
PSI at

rated flow

Air pressure gauges
Temperature gauges
Refrigerant low-side pressure gauge [sic]
Moisture separator [sic] and automatic drain
Charged with EPA approved refrigerant

Five offerors submitted proposals in response to the solicitation, and the contracting officer found that two of the five proposals did not meet the specifications. ACD did not submit an offer, but instead filed a protest with the contracting officer on June 25. The contracting officer referred the protest to this office in accordance with PM 4.5.6 c.1. The protester alleges that someone at the main post office in Louisville, KY is determined to get either a 50 horsepower Gardner-Denver rotary screw air compressor or no compressor at all. The protester further alleges that the specification in this solicitation is as fatally flawed as the specification that was included in the last solicitation. The protester contends that the specification is flawed in two major respects, citing the requirement for an 1800 maximum RPM motor and the requirement for a microprocessor control sequencer to support its claim. ACD claims that although the author of the

specification attempted to make the specification conform to the directives set out in the protest decision by using the words "necessary" and "vital" in the description, he was not successful.

The protester also argues that when the protest decision instructed the contracting officer to issue a solicitation that accurately reflected the "minimum needs of the Postal Service," it was referring to the minimum needs of "the total Postal Service," not the minimum needs of the main post office on Gardiner Lane in Louisville, KY. The protester claims that the affidavit it has submitted from its sales manager shows that there are currently several Postal Service facilities in the United States which are using Quincy Rotary Screw Air Compressors that do not meet the specifications set out in this solicitation, but meet the "minimum needs of the Postal Service." The protester contends that it is difficult to understand "how the folks at Gardiner Lane can feel that they can not operate their Postal System with a Quincy QMA50 Rotary Screw Air Compressor which operates at 3550 maximum motor RPM and does not have a Mi cro[p]rocessor Control System when the [main [p]ost [o]ffice in Washington, D.C., is operated by [e]ight (8) Quincy QMA 50s."

The protester further asserts that the specifications for the coalescing filter and the refrigerated air dryer are unduly restrictive because they require three inch inlet/outlet pipe connections. According to the protester, even the ZEKS refrigerated air dryer, which is the best dryer on the market, would not be able to satisfy these requirement because it only has a 2.5 inch pipe connection. In concluding, the protester asserts that it has made a "clear showing" that the specifications in this solicitation do not "accurately reflect . . . the minimum needs of the . . . Postal Service." (emphasis omitted).

In response to the protester's allegation concerning the requirement for an 1800 maximum RPM motor, the contracting officer points out that according to the affidavit submitted by the protester's sales manager, ACD could offer an air compressor with an 1800 maximum RPM motor since Quincy makes one. The contracting officer notes that in the affidavit, ACD's sales manager states that "[i]n the 50 horsepower range, Quincy has two (2) offerings. One is the QSI Series and the other is the QMA Series. The QSI Series utilizes an 1800 maximum RPM motor." The contracting officer also notes that in a brochure published by Quincy promoting the QSI series, Quincy states that "[m]otor wear and tear is minimal because required compressor driving forces are less and motor speed is slower -- 1800 RPM." The contracting officer asserts that the Postal Service agrees with this assessment and refers us to the statements submitted by the Manager, Plant Maintenance, the Architect, and the Director, Support Services

<sup>&</sup>lt;sup>4/</sup> In his statement, the Manager, Plant Maintenance explains that the Louisville GMF specified an 1800 maximum RPM motor because it "wanted a system that offered long-life, efficiency, reliability and less maintenance." The Manager further explained that as speeds of equipment are increased, the life of the equipment is shortened, its efficiency is reduced, its reliability is lessened and its maintenance requirements are increased.

Louisville Division, in support of the requirements set out in the specification.

In response to the protester's allegation that a microprocessor control system exceeds the minimum needs of the Postal Service, the contracting officer quotes the following paragraphs from the statement submitted by the Director, Support Services:

Microprocessor Controlled Sequencer -

This system will have two (2) compressors, initially, with a third compressor to be added in the future. One compressor will run continuously. The second processor will run several hours daily during peak load periods. A microprocessor enables programing [sic] the primary compressor and the secondary compressor, monitoring operating times of each compressor, alternating primary and secondary runs between the compressors, balancing operating times, maintaining the compressors at a similar level of repair, and providing a longer service life before overhaul or replacement is needed. A sequencer enables this to be done automatically, resulting in fewer man[-]hours than if the compressor usage was scheduled, tracked, and changed manually.

If the primary compressor incurs operating failure during the night, a sequencer automatically shifts operation to the next lead compressor scheduled. No manual diagnostics and switching will be required. The system will not lose all capacity for an indefinite period of time.

Monitor system performance and maintenance functions -

A control system will be able to provide indication to the maintenance person what caused equipment shutdown. This will reduce diagnostic time and possibly eliminate bringing in a qualified technician.

Provide for safety interlocks -

This will allow the compressor to shut down if problems develop and avoid costly damage to the system.

The contracting officer also quotes the following paragraph from the statement submitted by the Manager, Plant Maintenance, as justification for the microprocessor:

We requested a microprocessor because we wantedflexibility with making changes to the system with ease, we wanted more information readily available

than an analog system offers and we wanted the self-diagnostic capability that microprocessor technology provides. Those items are essential to our future and are consistent with technological changes that will improve our operation.

With respect to the protestor's allegation about the requirement for 3 inch inlet/outlet connections for the coalescing filter and the refrigerated air dryer, the contracting officer asserts that the three inch connections are needed to connect to the three inch air lines that have already been installed in this facility. The contracting officer further argues that any manufacturer can adapt his equipment to meet this requirement.

Finally, in response to the protester's contention that the requirements are too restrictive since other types of equipment are being used in various other Postal Service facilities, the contracting officer quotes the following sentences from the architect's statement:

Engineering design of a compressed air system MUST be site specific. Considerations of air volume requirements, operating temperatures, electrical availability, on site maintenance personnel, allowable variations in air pressures, distances to the equipment using the air, and many other factors must be considered. These factors vary from facility to facility.

The protester submitted comments in response to the contracting officer's statement. The protester states that everything that is mentioned in Quincy's descriptive literature concerning the advantages and benefits of the Quincy QSI air compressor is true. ACD notes, however, that the cost of the QSI air compressor "exceeds the cost of any of its competitors, including the Quincy QMA series." According to the protester, in a competitive bid situation where price is more important, "the Quincy QSI series is not a competitive machine." The protester also alleges that it is not possible to compare the Quincy QSI series to the Gardner-Denver 1800 maximum RPM motor air compressor because it would be like "comparing 'pheasant under glass' to a 'bologna sandwich'" since the QSI is expected to last a lot longer than the Gardner-Denver.

The protester further asserts that the contracting officer, the Manager, Plant Maintenance, the Architect, and the Director, Support Services all incorrectly equate "less maintenance, less frequent replacement and less down time" to an 1800 maximum RPM motor. The protester refers us to an independent study, submitted as an attachment to the protest, of all rotary screw and reciprocating compressors in the market, conducted for the <u>Journal of Plant & Facilities Management & Engineering</u> and published in the <u>AIPE Facilities</u> magazine. According to the protester, this study reveals that although the Gardner-Denver Electra-Saver II utilizes an 1800 maximum RPM motor, its "expected overall longevity in operating hours is 40,000+." The Quincy QMA rotary screw air compressor, on the other hand, which has a 3550 maximum RPM motor, has an expected longevity of 100,000 operating hours.

The protester also refers us to an exhibit it submitted which lists when the different parts of the Gardner-Denver Electra-Saver II should be changed. The protester points out that according to this exhibit "the air end of [the Electra-Saver II] must be overhauled at 18,000 hours." ACD alleges that the sole purpose for the requirement of an 1800 maximum RPM motor "is to exclude all [rbtary [s]crew [a]ir [c]ompressors with the exception of the Electr[a-S]aver II and the Quincy QSI Series", not to get an air compressor with longer life and lower maintenance, as the Manager, Plant Maintenance asserts in his statement.

ACD also challenges the justifications provided to support the requirement of a microprocessor. The protester alleges that the Director, Support Services is incorrectly under the impression that "only a microprocessor will allow the lead/lag, sequencing of compressors." The protester asserts that the Quincy QMA when controlled by the Quincy "Demand-A-Matic" has this capability and is more reliable than the Gardner Denver microprocessor. According to the protester, the "Demand-A-Matic" provides for "the establishment of a lead/lag unit, allows for a timed alternation of the primary and secondary units, [and] provides for the lag machine to take over should there be a demand greater tha[n] the ability of the lead machine to handle or should the lead machine fail."

The protester further alleges that contrary to the statement made by the Director, Support Services, the microprocessor does not provide "greater safety intelocks or fail safe systems, than [are] provided by the controls on the Quincy QMA or Quincy QSI." The protester argues that "it is easier for a maintenance person to see a red high air discharge temp[erature] light on a control panel than it is to have to pull up functions on a microprocessor." ACD also questions the self diagnostic capability of a microprocessor, stating that whether the high air discharge temperature "is shown on the microprocessor or on the control panel of the Quincy, the maintenance personnel are still going to have to go to a manual to determine probable causes." The protester reiterates its allegation that the requirement for a microprocessor control is an "attempt to buy only one brand, and that is the Gardner Denver."

Finally, with respect to the three inch inlet/outlet connections, the protester argues that the "true frame of mind" of the Manager, Plant Maintenance is reflected in the following statement he made: "We do not want to alter our air[]lines to accommodate a supplier[']s shortfall in meeting our needs." The protester claims that while an unit offering a 2.5" inlet/outlet could be connected to the existing airlines by adding a "2.5 [inch by] 3 [inch] reducing coupling", the Manager, Plant Maintenance would "use the 3" NPT inlet/outlet [requirement] to disqualify a dryer, because . . . he wishes to have a particular brand that just happens to have 3" NPT inlet/outlet."

In his reply to the protester's comments, the contracting officer reasserts that the

<sup>5/2</sup> The protester does not explain what the "Demand-AMatic" is or how it works.

documentation submitted with his statement fully explains and supports the requirements for a maximum 1800 RPM motor and a microprocessor. The contracting officer also notes that although the protester claims that the specification is designed to exclude all air compressors except the Gardner-Denver, he has received two proposals from vendors other than Gardner-Denver which "maintain that their equipment meets or exceeds the specifications contained in the solicitation."

Atlas submitted comments, contending that even if QuincyQMA's were installed in Washington, D.C., it sees no reason why the Postal Service could not follow general industry standard and raise its minimum needs in the time since the Quincy machines were installed at that location. According to Atlas, "one cannot reasonably assume that the needs of a facility constructed some time ago in Washington, D.C. and the needs of a facility currently contemplated in Louisville, KY are necessarily the same because they share a common ownership." Atlas states it could point to numerous Postal Service facilities using Gardner-Denver machines, but "that would do nothing to define the site-specific needs of the Louisville facility."

Atlas also disagrees with the protester's allegation that the specifications are unduly restrictive. Atlas states that 1800 RPM machines offer significant advantages over higher speed units such as "reduced wear, lower operating temperatures, increased life, less maintenance, and <u>substantially</u> greater efficiency." (emphasis in original). With respect to the requirement for a microprocessor, Atlas states that within the last three years, microprocessors have become standard equipment on most industrial air compressors sold in the United States "because of their obvious advantages." As for the dryer pipe size specification, Atlas notes that dryer manufacturers have the ability to install almost any size inlet and discharge connections. According to Atlas, "[s]nce it is a fundamental law of physics that increases in pipe and air friction are inversely related, the advantages of a larger pipe size are obvious."

Air Dynamics Inc. ("Air Dynamics") also submitted comments, claiming that "[t]he speed of the motor definitely contributes to the reliability and durability of the unit", as the literature from ACD's manufacturer states. Air Dynamics further states that ACD can offer an air compressor that meets the specifications. Air Dynamics also claims that "in order to automatically alternate the two compressors and keep equal amount of running hours on each, a microprocessor control sequencer is required." According to Air Dynamics, "if a third machine is added, the sequencer becomes even more essential to operating the compressors in the manner that [the Louisville] facility demands. The sequencer will give the needed flexibility of operating the three machines." As for the three inch connections, Air Dynamics states that ACD "could easily add a 3" connector to the inlet and outlet ports of the dryer and filter to sufficiently meet the specifications."

## Discussion

ACD alleges that three requirements in the specification, the 1800 maximum RPM

motor, the microprocessor and the three inch connections for the dryer and filter, are unduly restrictive of competition. Generally, when a specification has been challenged as unduly restrictive:

[I]t is incumbent upon the procuring agency to establish <u>prima facie</u> support for its contention that the restrictions it imposes are reasonably related to its needs. But once the agency establishes this support, the burden is then on the protester to show that the requirements complained of are clearly unreasonable.

<u>Air Compressor Distributor, Inc.</u>, P.S. Protest No. 92-09, March 24, 1992, <u>quoting Equipment Marketing Consultants Corporation</u>, P.S. Protest No. 90-07, April 17, 1990. This office will not substitute its judgment for that of the technical personnel absent evidence of "fraud, prejudice, or arbitrary and capricious action." <u>Crown Industries</u>, <u>Inc.</u>, P.S. Protest No. 85-40, August 12, 1985.

As to each of the three requirements at issue here, the contracting officer has provided several grounds which serve to establish the <u>prima facie</u> support necessary to justify the requirements. First, the requirement for an 1800 maximum RPM motor stems from the Postal Service's desired need to have a system that offers long-life, reliability and less maintenance. As the Manager, Plant Maintenance explained, as speeds of equipment are increased, the life of the equipment is shortened and its maintenance requirements are increased. Second, as we found in our previous decision, <u>Air Compressor Distributors, Inc., supra,</u> the requirement for a microprocessor flows from the Postal Service's desire to have a system that has sequencing, monitoring, and safety features. Finally, the requirement for three inch connections for the dryer and filter stems from the need to have connections that fit the three inch air lines that have already been installed in the Louisville postal facility. All these explanations survive the first hurdle of our analysis, establishing <u>prima facie</u> justification for the restrictions. The question then becomes whether any of these restrictions are clearly unreasonable.

ACD argues that the requirement for an 1800 maximum RPM motor is unreasonable because there is no reasonable relation between the speed of the motor and the longevity of the air compressor, as the contracting officer contends. In support of its position, the protester points to an independent study which noted that the Gardner-Denver Electra-Saver II which utilizes an 1800 maximum RPM motor is expected to last only 40,000+ operating hours, while an air compressor such as the Quincy QMA which has a 3550 maximum RPM motor has an expected longevity of 100,000 operating hours.

"In a factual dispute such as this, the conclusions of the contracting officer are accorded a presumption of correctness which the protester must overcome." <u>T.J. O'Brien Company, Inc. et al.</u>, P.S. Protest No. 87-83, September 17, 1987. ACD has not met its burden of persuasion. The contracting officer's justifications for the

requirement of an 1800 maximum RPM motor, while disputed, are not unreasonable.<sup>1</sup>

The requirement that the air compressor have a microprocessor is also not clearly unreasonable. The protest file supports the contracting officer's determination that the features that the microprocessor technology provides are essertial to the future plans of the Louisville facility, which include adding a third air compressor. Although the protester argues that the air compressor it wants to offer, the Quincy QMA, when controlled by the Quincy "Demand-A-Matic" has many of the same capabilities as a microprocessor, it has failed to demonstrate how the requirement for a microprocessor is clearly unreasonable. We note that if the terms of the solicitation reflect the legitimate needs of the procuring activity and the specification is otherwise reasonable, as it is here, "the fact that one or more potential offerors may be precluded from participating in the solicitation does not render its terms restrictive." Equipment Marketing Consultants Corporation, P.S. Protest No. 90-07, April 17, 1990. 11

The protester also contends that the fact that several Postal Service facilities in the United States, including the main post office in Washington, DC, are using Quincy QMA air compressors shows that these air compressors meet the minimum needs of the Postal Service, and that therefore the current specification is unduly restrictive. We dealt with a similar issue in <a href="Crown Industries, Inc.">Crown Industries, Inc.</a>, P.S. Protest No. 82-83, January, 1983. In that case, the protester argued that a solicitation issued by the Western Region for bronze-anodized aluminum stanchions was unduly restrictive because it did not allow the protester to bid its bronze-painted steel stanchions. The contracting officer defended this restriction based on the requiring activity's desire to have standardization of stanchions. We held that the restriction was reasonable, even in the face of evidence that the Southern Region had revised another solicitation, following similar objections, to allow bids on bronze-painted steel stanchions. We found that it was possible for the Western Region to perceive a greater need for uniformity than did the Southern Region. We noted that:

We note that this conclusion is not contradictory to our finding in Air Compressor Distributors, Inc, supra. In that decision, we found that except for the microprocessor, all the requirements in the solicitation, which would include the requirement for an 1800 maximum RPM motor, were unduly restrictive. We made this finding, however, based on the contracting officer's statement that these restrictions appeared to be restrictive since little response had been obtained. By contrast, in this case, the contracting officer has provided several justifications for needing an 1800 maximum RPM motor and has established prima facie support for it. The contracting officer has also shown that he has received several offers in response to this solicitation which appear to meet the specifications.

We also note that ACD's repeated assertions that these restrictions were included in the specification in order to exclude all potential offerors, except for those offering the Gardner-Denver air compressor, are unfounded. The record indicates that at least one offeror has offered an air compressor which appæntly meets all the specifications but is not a Gardner-Denver.

In the absence of a nationwide policy issued by the Postal Service's national management, the determination of minimum need clearly is a matter left to the discretion of Regional requiring activities.

We see no reason to depart from the principles expounded in <u>Crown</u>, especially in a case such as this where the needs of the Postal Service may be different at different postal facilities as a result of differences in air volume requirements, operating temperatures, electrical availability, on site maintenance personnel and other factors.

Finally, the protester has failed to show that the requirement for three inch connections for the refrigerated air dryer and the coalescing filter are unreasonable. Although the requirement for three inch connections is disputed, it is clear from the record that any offeror with an air dryer that has 2.5 inch inlet and outlet ports could meet the specifications by adding a three inch connector. We find, therefore, that the three inch requirement does not unduly restrict competition.

The protest is denied.

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